CLAIMS

What is claimed is:

1. A laser capture microdissection method, comprising:

providing a sample that is to undergo laser capture microdissection;

positioning said sample on a translation stage of a laser capture microdissection instrument and within an optical axis of said laser capture microdissection instrument;

providing a transfer film carrier having a substrate surface and a laser capture microdissection transfer film coupled to said substrate surface;

placing said laser capture microdissection transfer film in juxtaposition with said sample with a pressure sufficient to allow laser capture microdissection transfer of a portion of said sample to said laser capture microdissection transfer film, without forcing nonspecific transfer of a remainder of said sample to said laser capture microdisection film; and then

moving said sample and said translation stage with a manual joystick subsystem that is connected to said translation stage; and then

transferring a portion of said sample to said laser capture microdissection transfer film, without forcing nonspecific transfer of a remainder of said sample to said laser capture microdissection transfer film.

2. The laser capture microdissection method of claim 1, wherein moving said sample and said translation stage with said manual joystick subsystem includes simultaneous X and Y movement.

3. The laser capture microdissection method of claim 1, wherein moving said sample and said translation stage with said manual joystick subsystem includes reducing a scalar movement defined by an operator.

4. A laser capture microdissection instrument, comprising:

a translation stage; and

a manual joystick subsystem coupled to said translation stage.

5. The laser capture microdissection instrument of claim 4, wherein said manual joystick subsystem includes a joystick that is coupled to said translation stage through a first spherical mounting that is movably connected to said joystick and a bracket that is mechanically connected to both said spherical mounting and said translation stage.

6. The laser capture microdissection instrument of claim 5, wherein said manual joystick subsystem includes a joystick having a second spherical mounting that is movably connected to a static bracket.

7. The laser capture microdissection instrument of claim 6, wherein a first length between said first spherical mounting and said second spherical mounting is less than a second length between said second spherical mounting and a bottom end of said joystick.

8. The laser capture microdissection instrument of claim 7, wherein a ratio of said first length to said second length is less than 1/5.

9. The laser capture microdissection instrument of claim 8, wherein said ratio is approximately 1/7.

10. The laser capture microdissection instrument of claim 4, further comprising an illumination/laser optical subsystem.

11. The laser capture microdissection instrument of claim 4, further comprising a transfer film carrier handling subsystem.

12. The laser capture microdissection instrument of claim 4, further comprising a vacuum chuck subsystem connected to said translation stage.

13. An inverted microscope, comprising:

a translation stage; and

a manual joystick subsystem connected to said translation stage.

14. The inverted microscope of claim 13, wherein said manual joystick subsystem includes a joystick that is coupled to said translation stage through a first spherical mounting that is movably connected to said joystick and a bracket that is mechanically connected to both said spherical mounting and said translation stage.

15. The inverted microscope of claim 14, wherein said manual joystick subsystem includes a joystick having a second spherical mounting that is movably connected to a static bracket.

16. The inverted microscope of claim 15, wherein a first length between said first spherical mounting and said second spherical mounting is less than a second length between said second spherical mounting and a bottom end of said joystick.

17. The inverted microscope of claim 16, wherein a ratio of said first length to said second length is less than 1/5.

18. The inverted microscope of claim 17, wherein said ratio is approximately 1/7.

19. The inverted microscope of claim 13, further comprising an illumination/laser optical subsystem.

20. The inverted microscope of claim 13, further comprising a transfer film carrier handling subsystem.

21. The inverted microscope of claim 13, further comprising a vacuum chuck subsystem connected to said translation stage.